



MEAS HD DO-35 SERIES THERMISTOR 5K BETA ^{25/85} 3950

- High Stability DO-35 Thermistor
- Highly Density (HD) electroceramic thermistor
- Hermetically sealed elements, glass encapsulation
- Axial Leads for PCB mounting
- High temperature devices for applications up to +300°C
- RoHS Compliant
- Copper clad steel (CCS Wire)

Features

- Hermetically sealed glass package
- Proven Stability at elevated temperatures
- High temperature capability to +300°C
- 24 AWG Nickel Plated CCS Wire
- Cost effective for high volume applications
- Temp range (Nickel plated) -40°C to +300 °C
- Temp range (Tinned) -40 °C to +200 °C

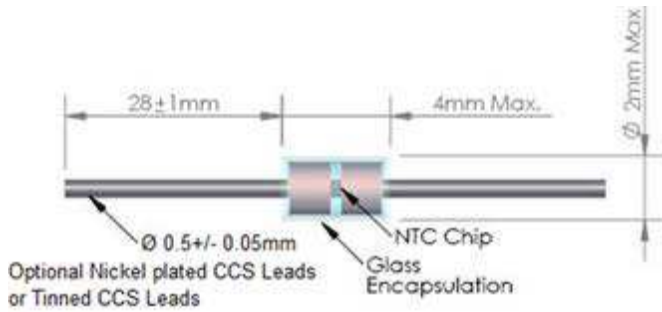
Applications

- HVAC and refrigeration probe assemblies
- High humidity due to glass protection
- Consumer electronics
- PCB temperature sensing
- Air conditioning

TE has recently developed new advanced ceramic processing techniques and proprietary formulations for the manufacture of high-stability electroceramic thermistor materials. These materials are now used in a select range of DO-35 thermistor sensor components. The newly developed high-density thermistor chip is hermetically sealed in a glass (DO-35 diode style) package to provide protection where high humidity is present and long-term performance is required.

MEAS NTC DO-35 THERMISTOR 5K BETA_{25/85} 3950

Dimensions



Electrical Specifications

PARAMETERS	UNITS	VALUE
Resistance @ +25°C	Ohms	5,000
Resistance tolerance @ +25°C	%	± 1
Beta Value 25/85	K	3950
Tolerance on Beta Value 25/85	%	± 1
Time response in liquid	Seconds	Approx.2
Dissipation Constant in still air	mW/°C	1.9
Operating Temperature (Nickel plated CCS Leads)	°C	-40 to +300
Operating Temperature (Tinned CCS Leads)	°C	-40 to +200
Max' Permissible Current (25°C, Still Air)	A max	0.25mA
Max' Power Rating (25°C, Still Air)	P max	110 mW

General Test

TEST ITEM	PERFORMANCE REQUIREMENTS	TEST CONDITION
A. Appearance	No Cracking	Visual examination
B. Dimension	Dimension tolerances	Caliper, Micrometer
C. Resistance (R25)	5K±1%	At zero power, 25°C.
D. Beta Value	B _{25/85} =3950K±1%	B = $\frac{\ln R_{25} - \ln R_{85}}{1/298.15 - 1/358.15}$
		R ₂₅ =Resistance at 25.0±0.1°C
		R ₈₅ =Resistance at 85.0±0.1°C
E. Thermal time constant (τ)	Approx.2 sec	Measured in stirred water
F. Thermal Dissipation Constant (δ)	Approx.1.9m W/°C	Measured in still air, normal temp

Reliability

TEST ITEM	TEST METHODS	CRITERIA
A. Low temperature storage	After placing a thermistor in -40°C±3°C for 1000 hours, keep it in normal temperature and humidity for one hour.	$\Delta R/R \leq 2\%$ $\Delta B/B \leq 1\%$
B. High temperature storage	Tinned Version: After placing a thermistor in 200°C±3°C for 1000 hours, keep it in normal temperature and humidity for one hour.	$\Delta R/R \leq 2\%$ $\Delta B/B \leq 1\%$
	Nickel Plated Version: After placing a thermistor in 300°C±3°C for 1000 hours, keep it in normal temperature and humidity for one hour.	$\Delta R/R \leq 3\%$ $\Delta B/B \leq 2\%$
C. Thermal cycle test	After 100 cycles test under the conditions as shown below, keep the thermistor in normal temperature and humidity for one hour.	$\Delta R/R \leq 2\%$ $\Delta B/B \leq 1\%$
<p>The diagram illustrates the thermal cycle test waveform. It features three horizontal lines representing temperature levels: 80°C±3°C (in air) at the top, Normal temp (in air) in the middle, and -20°C±3°C (in air) at the bottom. The waveform shows a sequence of temperature steps: a 30-minute dwell at 80°C, a 15-minute dwell at Normal temp, a 30-minute dwell at -20°C, and a 15-minute dwell at Normal temp. This sequence is labeled as '1 Cycle'. A second identical sequence is shown, labeled as '2 Cycle'.</p>		
D. Humidity test	After placing a thermistor in 40°C±2°C, 90~95%RH, for 1000 hours, keep it in normal temperature and humidity for one hour.	$\Delta R/R \leq 2\%$ $\Delta B/B \leq 1\%$

Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
-40.0	159.784	168.655	178.000	-6.67
-39.0	149.645	157.822	166.429	-6.62
-38.0	140.215	147.755	155.684	-6.57
-37.0	131.440	138.394	145.702	-6.53
-36.0	123.270	129.687	136.424	-6.48
-35.0	115.660	121.583	127.796	-6.43
-34.0	108.569	114.037	119.769	-6.39
-33.0	101.957	107.007	112.296	-6.35
-32.0	95.790	100.455	105.337	-6.30
-31.0	90.034	94.345	98.852	-6.26
-30.0	84.660	88.645	92.807	-6.21
-29.0	79.641	83.324	87.170	-6.17
-28.0	74.950	78.357	81.910	-6.13
-27.0	70.565	73.716	77.000	-6.09
-26.0	66.463	69.378	72.414	-6.05
-25.0	62.625	65.322	68.129	-6.01
-24.0	59.032	61.528	64.124	-5.97
-23.0	55.666	57.978	60.379	-5.93
-22.0	52.514	54.654	56.875	-5.89
-21.0	49.558	51.540	53.596	-5.85
-20.0	46.787	48.623	50.526	-5.81
-19.0	44.188	45.888	47.649	-5.77
-18.0	41.748	43.324	44.954	-5.74
-17.0	39.458	40.917	42.427	-5.70
-16.0	37.307	38.659	40.057	-5.66
-15.0	35.285	36.539	37.833	-5.63
-14.0	33.386	34.547	35.746	-5.59
-13.0	31.599	32.676	33.786	-5.55
-12.0	29.919	30.917	31.946	-5.52
-11.0	28.337	29.263	30.216	-5.49
-10.0	26.849	27.707	28.589	-5.45
-9.0	25.447	26.242	27.060	-5.42

Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
-8.0	24.127	24.864	25.621	-5.38
-7.0	22.882	23.566	24.267	-5.35
-6.0	21.709	22.342	22.992	-5.32
-5.0	20.603	21.190	21.792	-5.28
-4.0	19.559	20.103	20.660	-5.25
-3.0	18.574	19.078	19.594	-5.22
-2.0	17.644	18.111	18.589	-5.19
-1.0	16.766	17.199	17.641	-5.16
0.0	15.937	16.338	16.747	-5.13
1.0	15.152	15.524	15.903	-5.09
2.0	14.412	14.755	15.106	-5.06
3.0	13.711	14.030	14.354	-5.03
4.0	13.050	13.344	13.644	-5.00
5.0	12.424	12.696	12.973	-4.96
6.0	11.832	12.084	12.340	-4.93
7.0	11.271	11.504	11.741	-4.90
8.0	10.741	10.956	11.175	-4.87
9.0	10.238	10.437	10.639	-4.84
10.0	9.763	9.946	10.133	-4.81
11.0	9.312	9.481	9.653	-4.78
12.0	8.884	9.041	9.199	-4.74
13.0	8.479	8.623	8.769	-4.71
14.0	8.095	8.227	8.362	-4.69
15.0	7.730	7.852	7.975	-4.66
16.0	7.384	7.496	7.609	-4.63
17.0	7.055	7.158	7.262	-4.60
18.0	6.743	6.838	6.933	-4.57
19.0	6.446	6.533	6.621	-4.54
20.0	6.165	6.244	6.324	-4.51
21.0	5.897	5.969	6.043	-4.49
22.0	5.642	5.708	5.775	-4.46
23.0	5.400	5.460	5.521	-4.43
24.0	5.169	5.224	5.280	-4.41
25.0	4.950	5.000	5.050	-4.38
26.0	4.736	4.787	4.837	-4.35

Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
27.0	4.533	4.583	4.634	-4.33
28.0	4.339	4.390	4.441	-4.30
29.0	4.155	4.206	4.257	-4.27
30.0	3.979	4.030	4.082	-4.25
31.0	3.812	3.863	3.914	-4.22
32.0	3.653	3.704	3.755	-4.20
33.0	3.502	3.552	3.603	-4.18
34.0	3.357	3.407	3.458	-4.15
35.0	3.219	3.269	3.319	-4.13
36.0	3.088	3.137	3.187	-4.10
37.0	2.963	3.012	3.061	-4.08
38.0	2.843	2.892	2.941	-4.06
39.0	2.729	2.777	2.826	-4.03
40.0	2.620	2.668	2.716	-4.01
41.0	2.516	2.563	2.611	-3.99
42.0	2.417	2.463	2.510	-3.96
43.0	2.322	2.368	2.414	-3.94
44.0	2.232	2.277	2.322	-3.92
45.0	2.145	2.189	2.234	-3.90
46.0	2.063	2.106	2.150	-3.88
47.0	1.983	2.026	2.070	-3.85
48.0	1.908	1.950	1.993	-3.83
49.0	1.835	1.877	1.919	-3.81
50.0	1.766	1.807	1.848	-3.81
51.0	1.699	1.739	1.780	-3.79
52.0	1.636	1.675	1.715	-3.77
53.0	1.575	1.613	1.653	-3.74
54.0	1.516	1.554	1.593	-3.72
55.0	1.460	1.498	1.536	-3.70
56.0	1.407	1.443	1.481	-3.67
57.0	1.356	1.392	1.428	-3.65
58.0	1.307	1.342	1.378	-3.63
59.0	1.260	1.294	1.329	-3.61
60.0	1.215	1.248	1.283	-3.58
61.0	1.172	1.205	1.239	-3.56

Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
62.0	1.130	1.163	1.196	-3.54
63.0	1.091	1.122	1.155	-3.52
64.0	1.052	1.084	1.116	-3.50
65.0	1.016	1.046	1.078	-3.48
66.0	0.981	1.011	1.042	-3.45
67.0	0.947	0.977	1.007	-3.43
68.0	0.915	0.944	0.973	-3.41
69.0	0.884	0.912	0.941	-3.39
70.0	0.854	0.882	0.910	-3.37
71.0	0.826	0.853	0.880	-3.35
72.0	0.798	0.825	0.852	-3.33
73.0	0.772	0.798	0.824	-3.31
74.0	0.746	0.772	0.798	-3.29
75.0	0.722	0.747	0.772	-3.27
76.0	0.699	0.723	0.748	-3.26
77.0	0.676	0.700	0.724	-3.24
78.0	0.654	0.678	0.702	-3.22
79.0	0.633	0.656	0.680	-3.20
80.0	0.613	0.636	0.659	-3.18
81.0	0.594	0.616	0.638	-3.16
82.0	0.575	0.597	0.619	-3.14
83.0	0.557	0.578	0.600	-3.13
84.0	0.540	0.560	0.582	-3.11
85.0	0.523	0.543	0.564	-3.09
86.0	0.507	0.527	0.547	-3.07
87.0	0.492	0.511	0.531	-3.05
88.0	0.477	0.496	0.515	-3.04
89.0	0.462	0.481	0.500	-3.02
90.0	0.448	0.467	0.485	-3.00
91.0	0.435	0.453	0.471	-2.99
92.0	0.422	0.440	0.458	-2.97
93.0	0.410	0.427	0.444	-2.95
94.0	0.398	0.414	0.432	-2.94
95.0	0.386	0.402	0.419	-2.92
96.0	0.375	0.391	0.407	-2.90

Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
97.0	0.364	0.380	0.396	-2.89
98.0	0.353	0.369	0.385	-2.87
99.0	0.343	0.358	0.374	-2.86
100.0	0.334	0.348	0.364	-2.89
101.0	0.324	0.338	0.354	-2.88
102.0	0.315	0.329	0.344	-2.86
103.0	0.306	0.320	0.334	-2.85
104.0	0.297	0.311	0.325	-2.83
105.0	0.289	0.302	0.316	-2.81
106.0	0.281	0.294	0.307	-2.80
107.0	0.273	0.286	0.299	-2.78
108.0	0.265	0.278	0.291	-2.77
109.0	0.258	0.270	0.283	-2.75
110.0	0.251	0.263	0.276	-2.74
111.0	0.244	0.256	0.268	-2.72
112.0	0.237	0.249	0.261	-2.71
113.0	0.231	0.242	0.254	-2.69
114.0	0.225	0.236	0.248	-2.68
115.0	0.219	0.230	0.241	-2.66
116.0	0.213	0.224	0.235	-2.65
117.0	0.207	0.218	0.229	-2.63
118.0	0.202	0.212	0.223	-2.62
119.0	0.197	0.207	0.217	-2.60
120.0	0.192	0.201	0.212	-2.59
121.0	0.187	0.196	0.206	-2.58
122.0	0.182	0.191	0.201	-2.56
123.0	0.177	0.186	0.196	-2.55
124.0	0.173	0.182	0.191	-2.54
125.0	0.168	0.177	0.187	-2.52
126.0	0.164	0.173	0.182	-2.51
127.0	0.160	0.169	0.178	-2.49
128.0	0.156	0.164	0.173	-2.48
129.0	0.152	0.160	0.169	-2.47
130.0	0.148	0.157	0.165	-2.46
131.0	0.145	0.153	0.161	-2.44

Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
132.0	0.141	0.149	0.157	-2.43
133.0	0.138	0.146	0.154	-2.42
134.0	0.134	0.142	0.150	-2.40
135.0	0.131	0.139	0.146	-2.39
136.0	0.128	0.135	0.143	-2.38
137.0	0.125	0.132	0.140	-2.37
138.0	0.122	0.129	0.137	-2.35
139.0	0.119	0.126	0.133	-2.34
140.0	0.116	0.123	0.130	-2.33
141.0	0.114	0.120	0.127	-2.32
142.0	0.111	0.118	0.125	-2.31
143.0	0.109	0.115	0.122	-2.29
144.0	0.106	0.112	0.119	-2.28
145.0	0.104	0.110	0.116	-2.27
146.0	0.101	0.107	0.114	-2.26
147.0	0.099	0.105	0.111	-2.25
148.0	0.097	0.103	0.109	-2.24
149.0	0.095	0.100	0.106	-2.23
150.0	0.093	0.098	0.104	-2.22
151.0	0.090	0.096	0.102	-2.21
152.0	0.088	0.094	0.100	-2.20
153.0	0.087	0.092	0.098	-2.19
154.0	0.085	0.090	0.095	-2.18
155.0	0.083	0.088	0.093	-2.17
156.0	0.081	0.086	0.091	-2.16
157.0	0.079	0.084	0.090	-2.15
158.0	0.078	0.082	0.088	-2.14
159.0	0.076	0.081	0.086	-2.13
160.0	0.074	0.079	0.084	-2.12
161.0	0.073	0.077	0.082	-2.11
162.0	0.071	0.076	0.081	-2.10
163.0	0.070	0.074	0.079	-2.09
164.0	0.068	0.073	0.077	-2.08
165.0	0.067	0.071	0.076	-2.07
166.0	0.065	0.070	0.074	-2.07

Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
167.0	0.064	0.068	0.073	-2.06
168.0	0.063	0.067	0.071	-2.05
169.0	0.061	0.066	0.070	-2.04
170.0	0.060	0.064	0.068	-2.03
171.0	0.059	0.063	0.067	-2.02
172.0	0.058	0.062	0.066	-2.01
173.0	0.057	0.060	0.065	-2.00
174.0	0.055	0.059	0.063	-1.99
175.0	0.054	0.058	0.062	-1.98
176.0	0.414	0.443	0.475	-2.20
176.0	0.053	0.057	0.061	-1.97
177.0	0.052	0.056	0.060	-1.97
178.0	0.051	0.055	0.059	-1.96
179.0	0.050	0.054	0.057	-1.95
180.0	0.049	0.053	0.056	-1.94
181.0	0.048	0.052	0.055	-1.93
182.0	0.047	0.051	0.054	-1.92
183.0	0.046	0.050	0.053	-1.91
184.0	0.046	0.049	0.052	-1.91
185.0	0.045	0.048	0.051	-1.90
186.0	0.044	0.047	0.050	-1.89
187.0	0.043	0.046	0.049	-1.88
188.0	0.042	0.045	0.048	-1.87
189.0	0.041	0.044	0.048	-1.87
190.0	0.041	0.044	0.047	-1.86
191.0	0.040	0.043	0.046	-1.85
192.0	0.039	0.042	0.045	-1.84
193.0	0.038	0.041	0.044	-1.83
194.0	0.038	0.040	0.043	-1.83
195.0	0.037	0.040	0.043	-1.82
196.0	0.036	0.039	0.042	-1.81
197.0	0.036	0.038	0.041	-1.80
198.0	0.035	0.038	0.040	-1.79
199.0	0.034	0.037	0.040	-1.79
200.0	0.034	0.036	0.039	-1.78

Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
201.0	0.033	0.036	0.038	-1.77
202.0	0.033	0.035	0.038	-1.76
203.0	0.032	0.034	0.037	-1.76
204.0	0.031	0.034	0.036	-1.75
205.0	0.031	0.033	0.036	-1.74
206.0	0.030	0.033	0.035	-1.74
207.0	0.030	0.032	0.035	-1.73
208.0	0.029	0.032	0.034	-1.72
209.0	0.029	0.031	0.033	-1.71
210.0	0.028	0.031	0.033	-1.71
211.0	0.028	0.030	0.032	-1.70
212.0	0.027	0.029	0.032	-1.69
213.0	0.027	0.029	0.031	-1.69
214.0	0.026	0.029	0.031	-1.68
215.0	0.026	0.028	0.030	-1.67
216.0	0.026	0.028	0.030	-1.67
217.0	0.025	0.027	0.029	-1.66
218.0	0.025	0.027	0.029	-1.65
219.0	0.024	0.026	0.028	-1.65
220.0	0.024	0.026	0.028	-1.64
221.0	0.024	0.025	0.027	-1.63
222.0	0.023	0.025	0.027	-1.63
223.0	0.023	0.025	0.027	-1.62
224.0	0.022	0.024	0.026	-1.61
225.0	0.022	0.024	0.026	-1.61
226.0	0.022	0.023	0.025	-1.60
227.0	0.021	0.023	0.025	-1.59
228.0	0.021	0.023	0.025	-1.59
229.0	0.021	0.022	0.024	-1.58
230.0	0.020	0.022	0.024	-1.57
231.0	0.020	0.022	0.023	-1.57
232.0	0.020	0.021	0.023	-1.56
233.0	0.019	0.021	0.023	-1.56
234.0	0.019	0.021	0.022	-1.55
235.0	0.019	0.020	0.022	-1.54

Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
236.0	0.018	0.020	0.022	-1.54
237.0	0.018	0.020	0.021	-1.53
238.0	0.018	0.019	0.021	-1.53
239.0	0.018	0.019	0.021	-1.52
240.0	0.017	0.019	0.020	-1.51
241.0	0.017	0.019	0.020	-1.51
242.0	0.017	0.018	0.020	-1.50
243.0	0.017	0.018	0.020	-1.50
244.0	0.016	0.018	0.019	-1.49
245.0	0.016	0.017	0.019	-1.48
246.0	0.016	0.017	0.019	-1.48
247.0	0.016	0.017	0.018	-1.47
248.0	0.015	0.017	0.018	-1.47
249.0	0.015	0.016	0.018	-1.46
250.0	0.015	0.016	0.018	-1.46
251.0	0.015	0.016	0.017	-1.45
252.0	0.015	0.016	0.017	-1.45
253.0	0.014	0.016	0.017	-1.44
254.0	0.014	0.015	0.017	-1.43
255.0	0.014	0.015	0.016	-1.43
256.0	0.014	0.015	0.016	-1.42
257.0	0.014	0.015	0.016	-1.42
258.0	0.013	0.014	0.016	-1.41
259.0	0.013	0.014	0.016	-1.41
260.0	0.013	0.014	0.015	-1.40
261.0	0.013	0.014	0.015	-1.40
262.0	0.013	0.014	0.015	-1.39
263.0	0.012	0.013	0.015	-1.39
264.0	0.012	0.013	0.014	-1.38
265.0	0.012	0.013	0.014	-1.38
266.0	0.012	0.013	0.014	-1.37
267.0	0.012	0.013	0.014	-1.37
268.0	0.012	0.013	0.014	-1.36
269.0	0.011	0.012	0.014	-1.36
270.0	0.011	0.012	0.013	-1.35

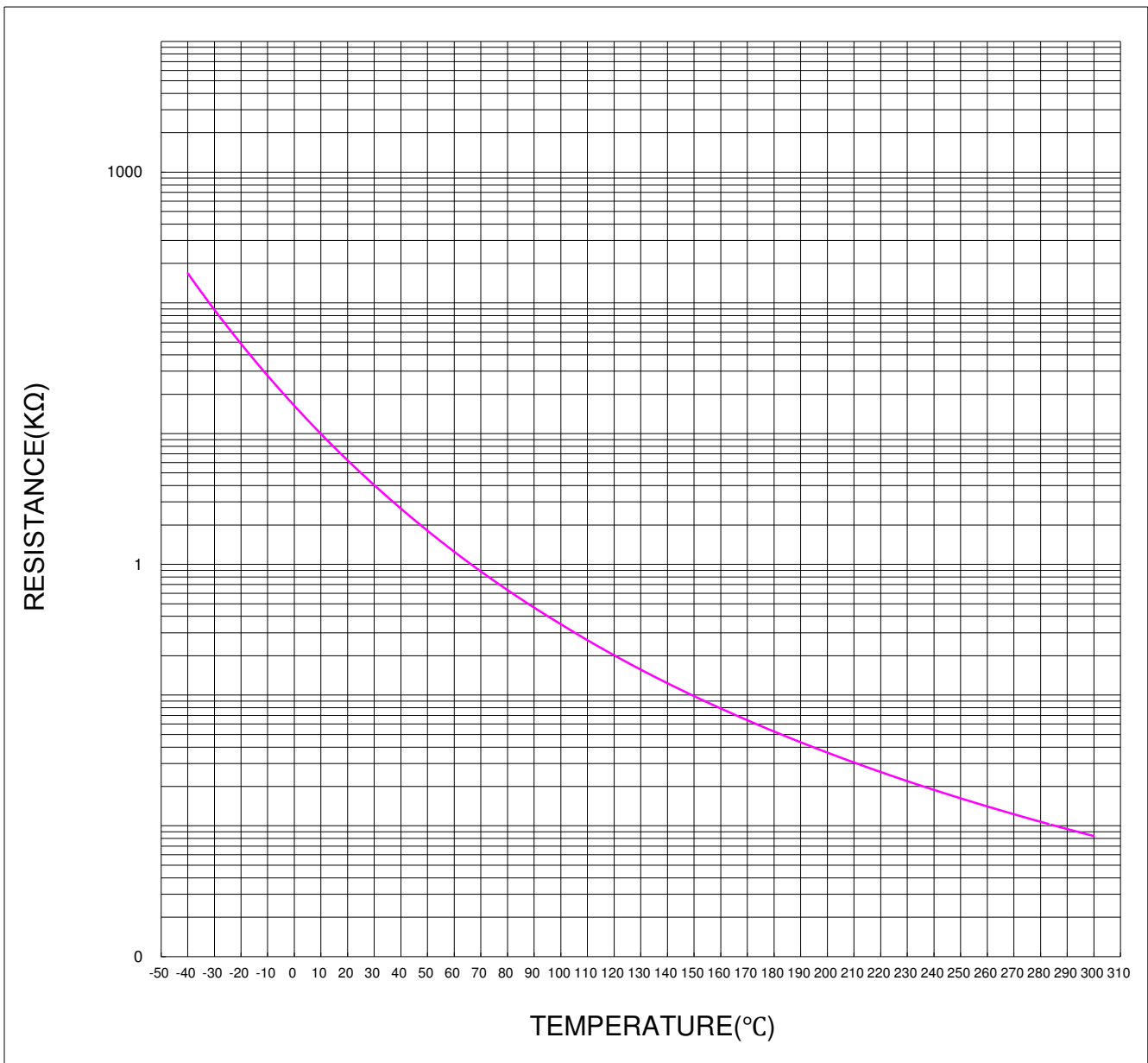
Resistance vs. Temperature Table

R25=5KΩ±1% B25/85=3950K±1%

TEMP. (°C)	MINIMUM (KΩ)	NOMINAL (KΩ)	MAXIMUM (KΩ)	ALPHA(%/°C)
271.0	0.011	0.012	0.013	-1.35
272.0	0.011	0.012	0.013	-1.34
273.0	0.011	0.012	0.013	-1.34
274.0	0.011	0.012	0.013	-1.33
275.0	0.011	0.011	0.012	-1.33
276.0	0.010	0.011	0.012	-1.32
277.0	0.010	0.011	0.012	-1.32
278.0	0.010	0.011	0.012	-1.31
279.0	0.010	0.011	0.012	-1.31
280.0	0.010	0.011	0.012	-1.30
281.0	0.010	0.011	0.012	-1.30
282.0	0.010	0.010	0.011	-1.29
283.0	0.009	0.010	0.011	-1.29
284.0	0.009	0.010	0.011	-1.28
285.0	0.009	0.010	0.011	-1.28
286.0	0.009	0.010	0.011	-1.27
287.0	0.009	0.010	0.011	-1.27
288.0	0.009	0.010	0.011	-1.27
289.0	0.009	0.010	0.010	-1.26
290.0	0.009	0.009	0.010	-1.26
291.0	0.009	0.009	0.010	-1.25
292.0	0.008	0.009	0.010	-1.25
293.0	0.008	0.009	0.010	-1.24
294.0	0.008	0.009	0.010	-1.24
295.0	0.008	0.009	0.010	-1.23
296.0	0.008	0.009	0.010	-1.23
297.0	0.008	0.009	0.009	-1.23
298.0	0.008	0.009	0.009	-1.22
299.0	0.008	0.008	0.009	-1.22
300.0	0.008	0.008	0.009	-1.21

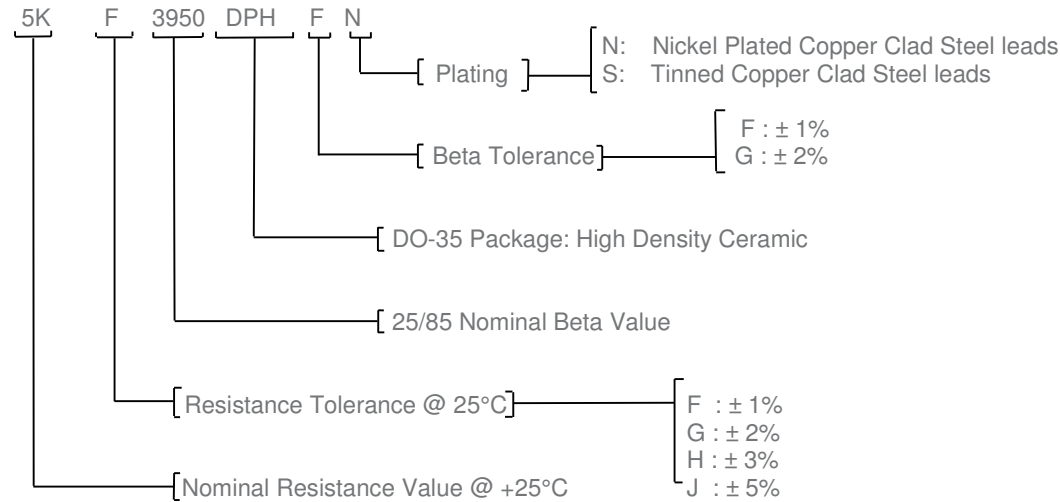
Resistance vs. Temperature Graph

R₂₅=5KΩ±1% B_{25/85}=3950K±1%



Ordering Information

PART NUMBER	DESCRIPTION	NOM. Ω @25°C	RES. TOLERANCE	PACKAGING
5KF3950DPHFN	DO-35 Series Thermistor (+300°C) ⁿ for Nickel version	5,000	± 1%	Bulk
5KF3950DPHFS	DO-35 Series Thermistor (+200°C) ⁿ for Tinned version	5,000	± 1%	Bulk



Other Resistance values available in this series

MEAS PART NUMBER	RESISTANCE [Ω] @ +25°C	TOLERANCE @ +25°C	BETA VALUE 25/85	BETA TOLERANCE	OPERATING TEMPERATURE
10KF3450DPHFN	10000	± 1%	3450	± 1%	-40° to +300°C
10KF3450DPHFS	10000	± 1%	3450	± 1%	-40° to +200°C
10KF3977DPHFN	10000	± 1%	3977	± 1%	-40° to +300°C
10KF3977DPHFS	10000	± 1%	3977	± 1%	-40° to +200°C
50KF4050DPHFN	50000	± 1%	4050	± 1%	-40° to +300°C
50KF4050DPHFS	50000	± 1%	4050	± 1%	-40° to +200°C

NORTH AMERICA

Measurement Specialties, Inc.,
 a TE Connectivity Company
 910 Turnpike Road
 Shrewsbury, MA 01545
 Tel : 1-508-842-0516
 Fax : 1-508-842-0342
 Email: customercare.ando@te.com

EUROPE

Measurement Specialties (Europe), Ltd.,
 a TE Connectivity Company
 Ballybrit Business Park
 Galway Ireland
 Tel : +353-91-753238
 Fax : +353-91-770789
 Email: customercare.glw@te.com

ASIA

Measurement Specialties (China), Ltd.,
 a TE Connectivity Company
 No. 368 Wulian 1st Road
 Gongxing Town
 Shuangliu, Chengdu
 Sichuan, 610200
 China
 Tel: +86 (0) 28 8573 9088
 Fax: +86 (0) 28 8573 9070
 Email: customercare.chdu@te.com

te.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, MEAS, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2016 TE Connectivity Ltd. family of companies All Rights Reserved.